Author Index of Volumes 43 and 44

Abraham, K. M., 195, 385
Ai, X., 399
Akridge, J. R., 505
Akturk, N., 349
Alamgir, M., 195, 385
Andrieu, X., 445
Andrukaitis, E., 603
Aotani, N., 135
Arakawa, M., 27, 517
Arakawa, Y., 523
Arbizzani, C., 453
Atlung, S., 733
Attia, A., 21
Aurbach, D., 47
Azuma, H., 241

Babai, M., 47
Bach, S., 569
Baffier, N., 569
Baker, G. L., 689
Bałkowska, A., 355
Baochen, W., 83, 539, 669
Bates, J. B., 103
Behl, W., 481
Besenhard, J. O., 413, 493
Biensan, Ph., 681
Bischoff, H., 473
Bittihn, R., 223, 409
Bludská, J., 547
Boeuve, J. P., 65, 445
Borong, Z., 669
Botkovitz, Ph., 657
Brec, R., 277, 657
Broussely, M., 65, 209, 681
Bruce, P. G., 461

Carmeli, Y., 47
Cattaneo, E., 341
Cha, C. S., 145
Changzhi, L., 669
Chen, L., 431, 487
Chen, S. Y., 709
Chen, W., 499
Cheng, T. T., 709
Choudhury, A., 103
Churikov, A. V., 157, 365
Chusid, O. (Youngman), 47
Chuvashkin, A. N., 365

Crespi, A. M., 119
Croce, F., 9, 481

De Kock, A., 289
De la Harpe, A. P., 289
Delmas, C., 595
Deniard, Ph., 657
Dollé, A., 681
Dongjiang, Z., 539
Downarowicz, J., 355
Dreher, J., 583
Dudney, N. J., 103
Dünger, H.-J., 405

Egorkina, O. Yu., 301
Eichinger, G., 259
Ein Ely, Y., 47
Endo, T., 241
Exnar, I., 701

Fahys, B., 349
Fey, G. T. K., 673, 709
Fujimoto, M., 253
Fujita, S., 241
Fujiwara, T., 635
Füllbier, H., 467
Furukawa, N., 253

Gaberšček, M., 391
Gamayunova, I. M., 157
Goodenough, J. B., 269
Gruzalski, G. R., 103
Guérard, D., 39
Gummow, R. J., 289
Guyomard, D., 689
Guyot, A., 453

Haas, B., 583
Halpert, G., 21, 327
Hamaide, T., 453
Hambitzer, G., 405, 583, 727
Hanada, T., 75
Hara, M., 253
Hasegawa, K., 523
Hauke, I., 421
Heng, Z., 309
Hep, J., 701
Herlem, M., 349
Herr, R., 223, 409

Heß, M., 493
Hoge, D., 223, 409
Hou, P., 499
Hsieh, M. C., 673
Huang, C.-K., 21
Huang, H., 431
Huang, X., 487
Humbert, M. A., 681
Huslage, J., 493

Ichimura, M., 27, 517
Ikezawa, Y., 611
Ikuta, H., 651
Ilic, D., 589
Imanishi, N., 619
Imoto, H., 241
Inoue, K., 619
Izydorek, J., 355

Jacobsen, T., 127
Jakubec, I., 547
Jamnik, J., 391
Jannakoudakis, A. D., 413
Jannakoudakis, P. D., 413
Jaw, H. K., 673, 709
Jiqiang, W., 309
Jones, M., 715
Jones, S. D., 505
Joos, M., 727
Juang, H. K., 709
Jurewicz, K., 493

Kanamura, K., 627
Kato, S., 89
Kawaguchi, M., 75
Kilroy, W. P., 385, 715
Kishi, T., 645
Knutz, B. C., 733
Koksbang, R., 461
Kolb, D. M., 169
Kondo, S., 135
Kozawa, A., 551
Krebber, U., 493
Krok, F., 461
Kumagai, N., 635

Labat, J., 209
Ladhily, H., 681
Lecerf, A., 681

Lee, T. J., 673, 709
Lei, M., 399
Levy, S. C., 247
Li, F., 83, 539
Li, S., 399, 533
Liles, D. C., 289
Lin, Q., 309
Liu, L., 499
Lobitz, P., 467
Luck, C. F., 103
Lutter, W., 405
Lvov, A. L., 157, 365

Machill, S., 421
Manev, V., 551, 561
Manthiram, A., 269
Mao, Z., 181
Marinangeli, A. M., 453
Mashiko, S., 241
Mastragostino, M., 453
Matsuda, Y., 1, 75, 439
Meneghello, L., 453
Menetrier, M., 431
Messina, R., 569
Mine, T., 611
Miura, T., 645
Momchilov, A., 551, 561
Morita, A., 233
Morita, M., 75, 439
Murata, K., 89

Nagashima, M., 611
Nakane, I., 217, 253
Narayanan, S. R., 21
Narukawa, S., 253
Nassalevska, A., 551, 561
Nemoto, Y., 27, 517
Neumann, D., 589
Nimon, E. S., 157, 365
Nishi, Y., 241
Nishio, K., 217, 253
Noda, T., 89
Nohma, T., 217, 253

Odink, D. A., 577
Ogumi, Z., 377
Ohta, A., 233
Omaru, A., 241
Ouvrard, G., 277, 577
Ozaki, Y., 233

Pasquali, M., 561
Pasquariello, D. M., 385
Passerini, S., 481
Pearce, K., 289
Pejovnik, S., 391
Peled, E., 21
Pereira-Ramos, J. P., 569
Perton, F., 209
Pistoia, G., 561
Plichta, E., 481
Polsonetti, P., 715
Polszakiewicz, B., 355
Prouzet, E., 277

Rahner, D., 421, 473
Reiche, A., 467
Robertson, J. D., 103
Romero, A., 209
Rossouw, M. H., 289
Rougier, A., 595
Ruch, J., 341
Ruizhen, Q., 309

Saadoune, I., 595
Saito, T., 217, 253
Sakaebe, H., 627
Salomon, M., 481
Sandner, R., 473
Schlaikjer, C., 715
Schleich, D., 481
Schmidt, C. L., 111
Schoonman, J., 487
Schriever, U., 727
Scrosati, B., 9, 481
Sekai, K., 241
Shah, P. M., 317
Shan, Z., 499
Shen, D. H., 21, 327
Shi, Z., 533
Shirokov, A. V., 365
Simon, B., 65
Skaarup, S., 127
Skarstad, P. M., 111, 119
Skundin, A. M., 301
Staniewicz, R. J., 209
Stefanovskaya, E. E., 301
Steurich, T., 473
Stimming, U., 169
Surampudi, S., 21
Szcześniak, B., 355
Szłapka, R., 355

Takada, K., 135
Takahashi, M., 253
Takamura, T., 611
Takeda, Y., 619
Takehara, Z., 377, 627
Takeuchi, K., 89
Tanno, K., 635
Tarascon, J. M., 689
Tchangbedji, G., 577
Thackeray, M. M., 289
Theodoridou, E., 413
Tobishima, S., 27, 517
Tournoux, M., 657
Tsutsumi, H., 439

Uchida, T., 651
Uchimoto, Y., 377

Vicédo, T., 445
Vincent, C. A., 461
Vogel, R., 169
Vondrák, J., 547

Wagner, M. W., 413
Wakihara, M., 651
Walas, I., 355
Watanabe, H., 217
Werblan, L., 355
West, K., 127, 733
White, R. E., 181
Wiesener, K., 421, 473
Will, T., 169
Winter, M., 413
Wnetrzewski, B., 269

Xue, R., 431
Xuezhang, M., 309

Yamaki, J., 27, 517
Yamamoto, O., 619
Yamaura, J., 233
Yamaura, K., 241
Yang, C., 533
Yang, H., 399, 533
Yang, H. X., 145
Yang, L., 499
Yasuda, K., 377
Yazami, R., 39
Yixiong, T., 309
Yokogawa, M., 241
Yongyao, X., 83, 539
Yoshida, H., 377
Yoshihisa, Y., 89
Yoshimura, S., 217, 253
Yuegen, C., 309

Zachau-Christiansen, B., 127, 733
Zuhr, R. A., 103

Subject Index of Volumes 43 and 44

Alloys
investigations on rechargeable lithium alloys on the basis of Al–Ni and Al–Mn alloys, 421
Aluminium
investigations on rechargeable lithium alloys on the basis of Al–Ni and Al–Mn alloys, 421
Amines
conductivity and stability towards lithium metal of lithium triflate ($LiSO_3CF_3$) and lithium bistrifluoro-sulfonylimide ($Li(SO_2CF_3)_2N$) in amines and their mixtures with ammonia, 349
new conducting polymer networks, 445
Ammonia
conductivity and stability towards lithium metal of lithium triflate ($LiSO_3CF_3$) and lithium bistrifluoro-sulfonylimide ($Li(SO_2CF_3)_2N$) in amines and their mixtures with ammonia, 349

Batteries
development of cylindrical secondary lithium/polyaniline batteries, 669
Boron
a new negative electrode matrix, BC_2N, for rechargeable lithium batteries, 75
Bronze
reversible potassium vanadium bronze cathodes ($K_xV_6O_{13+y}$) with various potassium to vanadium ratios, 603

Capacity
relationship of cathode pore-size distribution and rated capacity in Li/MnO_2 cells, 709
Carbon
a new negative electrode matrix, BC_2N, for rechargeable lithium batteries, 75
the SWING system, a nonaqueous rechargeable carbon/metal oxide cell, 223
high voltage, rechargeable lithium batteries using newly-developed carbon for negative electrode material, 233
lithium-ion rechargeable cells with $LiCoO_2$ and carbon electrodes, 241
improvement of heavy-drain discharge properties of polypyrrole cathode by the electro-codeposition of carbon powder, 611
Carbon electrodes
electrochemical and spectroscopic studies of carbon electrodes in lithium battery electrolyte systems, 47
electrochemical study of the passivating layer on lithium intercalated carbon electrodes in nonaqueous solvents, 65
studies of carbon as negative electrode materials for secondary lithium batteries, 399
stability of lithiated carbon electrodes in organic electrolytes, 409
Carbon–lithium
inorganic film-forming electrolyte additives improving the cycling behaviour of metallic lithium electrodes and the self-discharge of carbon–lithium electrodes, 413
Cathode materials
characterization of $Cu_2V_2O_7$ as cathode material for lithium cells by X-ray and photoelectron spectroscopy, 589
a high performance Li_xMnO_y cathode material for rechargeable lithium cells, 681
Cathode pore-size distribution
relationship of cathode pore-size distribution and rated capacity in Li/MnO_2 cells, 709
Cathodes
reversible potassium vanadium bronze cathodes ($K_xV_6O_{13+y}$) with various potassium to vanadium ratios, 603
improvement of heavy-drain discharge properties of polypyrrole cathode by the electro-codeposition of carbon powder, 611
thiospinels as cathode for lithium secondary battery, 619

nickel Chevrel-phase sulfides $Ni_yMo_6S_{8-z}$ and $Ni_yMo_6S_{8-z}O_n$ as the cathode of lithium secondary batteries, 651
Chromium oxide
studies of spinel $LiCr_xMn_{2-x}O_4$ for secondary lithium battery, 539
Cobalt
lithium-ion rechargeable cells with $LiCoO_2$ and carbon electrodes, 241
Cobalt oxide
Li/Li_xNiO_2 and Li/Li_xCoO_2 rechargeable systems: comparative study and performance of practical cells, 209
the $Li_xTiS_2|Li_{(1-x)}CoO_2$ solid-state rocking chair battery, 481
the cycling properties of the $Li_xNi_{1-y}Co_yO_2$ electrode, 595
a rechargeable Li/Li_xCoO_2 cell incorporating a $LiCF_3SO_3$–NMP electrolyte, 673
Composite dimensional manganese oxide (CMDO)
electrochemical and structural studies of the composite MnO_2 cathode doped with metal oxides, 533
Composite insertion electrodes
discharge performance of composite insertion electrodes. Analysis of discharges of 50 vol.% Li_3N/TiS_2 electrodes, 733
Copper
metal deposition and dissolution monitored by *in situ* scanning tunneling microscopy, 169
Copper oxide
characterization of $Cu_2V_2O_7$ as cathode material for lithium cells by X-ray and photoelectron spectroscopy, 589
Copper sulfide
copper(II) sulfide as cathode active material in secondary lithium batteries, 701
Current density
lithium electrode cycleability and morphology dependence on current density, 27
Cycleability
interfacial phenomena in polymer-electrolyte cells: lithium passivation and cycleability, 9
lithium electrode cycleability and morphology dependence on current density, 27
Cycling
effect of cycling on the lithium/electrolyte interface in organic electrolytes, 21
lithium-cycling efficiency in inorganic electrolyte solution, 405
inorganic film-forming electrolyte additives improving the cycling behaviour of metallic lithium electrodes and the self-discharge of carbon–lithium electrodes, 413
two- and three-electrode studies of cycling in experimental polymer electrolyte cells, 461
the cycling properties of the $Li_xNi_{1-y}Co_yO_2$ electrode, 595

1,1-Difluoroethene
modification of lithium/electrolyte interface by plasma polymerization of 1,1-difluoroethene, 377
Discharge behaviour
modeling the discharge behavior of the lithium/iodine battery, 111
improvement of heavy-drain discharge properties of polypyrrole cathode by the electro-codeposition of carbon powder, 611

Electrochemical lithiation
inhomogeneous electrochemical lithiation of V_2O_5–TeO_2 binary glasses in a propylene carbonate solution, 645
Electrode reactions
volatile products of electrode reactions in inorganic electrolyte, 727
Electrodes
lithium-ion rechargeable cells with $LiCoO_2$ and carbon electrodes, 241
electrodes for lithium batteries, 269
anodic stability of propylene carbonate on manganese dioxide electrodes, 341
insertion of lithium into RuO_2–TiO_2 electrodes, 547
the cycling properties of the $Li_xNi_{1-y}Co_yO_2$ electrode, 595
discharge performance of composite insertion electrodes. Analysis of discharges of 50 vol.% Li_3N/TiS_2 electrodes, 733
Electrolytes
impedance study of the interfaces between lithium, polyaniline, lithium-doped MnO_2 and modified poly(ethylene oxide) electrolyte, 83

inorganic film-forming electrolyte additives improving the cycling behaviour of metallic lithium electrodes and the self-discharge of carbon–lithium electrodes, 413
safety study of electrolyte solutions for lithium batteries by accelerating-rate calorimetry, 523

Glasses
inhomogeneous electrochemical lithiation of V_2O_5–TeO_2 binary glasses in a propylene carbonate solution, 645
Gold
metal deposition and dissolution monitored by *in situ* scanning tunneling microscopy, 169

Impedance studies
impedance study for the interface and whole battery with PAN-based polymer electrolyte, 431
Inorganic electrolytes
lithium-cycling efficiency in inorganic electrolyte solution, 405
rechargeable $LiCoO_2$ in inorganic electrolyte solution, 583
volatile products of electrode reactions in inorganic electrolyte, 727
Iron
application of FeOOH derivatives for a secondary lithium battery, 627
Iron sulfide
relationship between composition of the electrolyte solutions and energetic performance of 1.5 V non-aqueous cells of lithium/iron sulfide system, 355

Lithium
photoelectrochemistry of lithium, 157
thermal modelling of a high power $Li/SOCl_2$ cell with parallel plates, 309
a high power lithium thionyl chloride battery for space applications, 317
conductivity and stability towards lithium metal of lithium triflate ($LiSO_3CF_3$) and lithium bistrifluorosulfonylimide ($Li(SO_2CF_3)_2N$) in amines and their mixtures with ammonia, 349
relationship between composition of the electrolyte solutions and energetic performance of 1.5 V non-aqueous cells of lithium/iron sulfide system, 355
space-charge model of the SEI conduction in the $Li/SOCl_2$ system, 391
investigations on rechargeable lithium alloys on the basis of Al–Ni and Al–Mn alloys, 421
insertion of lithium into RuO_2–TiO_2 electrodes, 547
the cycling properties of the $Li_xNi_{1-y}Co_yO_2$ electrode, 595
development of cylindrical secondary lithium/polyaniline batteries, 669
a rechargeable Li/Li_xCoO_2 cell incorporating a $LiCF_3SO_3$–NMP electrolyte, 673
an update of the Li metal-free rechargeable battery based on $Li_{1+x}Mn_2O_4$ cathodes and carbon anodes, 689
Lithium/electrolyte interface
behavior of lithium/electrolyte interface in organic solutions, 1
interfacial phenomena in polymer-electrolyte cells: lithium passivation and cycleability, 9
effect of cycling on the lithium/electrolyte interface in organic electrolytes, 21
modification of lithium/electrolyte interface by plasma polymerization of 1,1-difluoroethene, 377
Lithium/iodine batteries
modeling the discharge behavior of the lithium/iodine battery, 111
Lithium anodes
polymer electrolyte coatings for lithium anodes in $SOCl_2$ cells, 385
Lithium batteries
electrochemical and spectroscopic studies of carbon electrodes in lithium battery electrolyte systems, 47
a new negative electrode matrix, BC_2N, for rechargeable lithium batteries, 75
impedance study of the interfaces between lithium, polyaniline, lithium-doped MnO_2 and modified poly(ethylene oxide) electrolyte, 83
application of solid-polymer electrolyte in lithium batteries: ultra-thin film battery, 89
fabrication and characterization of amorphous lithium electrolyte thin

films and rechargeable thin-film batteries, 103
parasitic reactions and the balance of materials in lithium batteries for implantable medical devices, 119
thin-film vanadium oxide electrodes for lithium batteries, 127
electrochemical behaviors of Li^+ ion conductor, Li_3PO_4–Li_2S–SiS_2, 135
recent advances in experimental methods applied to lithium battery researches, 145
investigation of an electrolyte for lithium secondary batteries with lithium-containing manganese dioxide as the positive material, 217
high voltage, rechargeable lithium batteries using newly-developed carbon for negative electrode material, 233
safety and reliability studies of primary lithium batteries, 247
electrodes for lithium batteries, 269
the versatility of MnO_2 for lithium battery applications, 289
ionic transport in passivating layers on the lithium electrode, 365
studies of carbon as negative electrode materials for secondary lithium batteries, 399
lithium/polymer/polymer solid-state rechargeable batteries, 453
the $Li_xTiS_2|Li_{(1-x)}CoO_2$ solid-state rocking chair battery, 481
thermal stability of lithium anodes in an amorphous V_2O_5/Li battery system, 517
safety study of electrolyte solutions for lithium batteries by accelerating-rate calorimetry, 523
studies of spinel $LiCr_xMn_{2-x}O_4$ for secondary lithium battery, 539
potassium vanadates – promising materials for secondary lithium batteries, 561
rechargeable γ-MnO_2 for lithium batteries using a sulfone-based electrolyte at 150 °C, 569
V_2O_4S – a new transition metal oxysulfide as positive for lithium batteries, 577
thiospinels as cathode for lithium secondary battery, 619
application of FeOOH derivatives for a secondary lithium battery, 627
nickel Chevrel-phase sulfides $Ni_yMo_6S_{8-z}$ and $Ni_yMo_6S_{8-z}O_n$ as the cathode of lithium secondary batteries, 651
copper(II) sulfide as cathode active material in secondary lithium batteries, 701

Lithium–carbon compounds
some aspects on the preparation, structure and physical and electrochemical properties of Li_xC_6, 39

Lithium–carbon intercalation
electrochemical and spectroscopic studies of carbon electrodes in lithium battery electrolyte systems, 47
electrochemical study of the passivating layer on lithium intercalated carbon electrodes in nonaqueous solvents, 65

Lithium cells
interfacial phenomena in polymer-electrolyte cells: lithium passivation and cycleability, 9
effect of cycling on the lithium/electrolyte interface in organic electrolytes, 21
a model for the deliverable capacity of the TiS_2 electrode in a Li/TiS_2 cell, 181
a study on electrolytes for manganese dioxide–lithium cells, 253
safety aspects in primary high-rate lithium cells, 259
lithium-cycling efficiency in inorganic electrolyte solution, 405
stability of lithiated carbon electrodes in organic electrolytes, 409
characterization of $Cu_2V_2O_7$ as cathode material for lithium cells by X-ray and photoelectron spectroscopy, 589
a high performance Li_xMnO_y cathode material for rechargeable lithium cells, 681
relationship of cathode pore-size distribution and rated capacity in Li/MnO_2 cells, 709
optimized lithium oxyhalide cells, 715

Lithium electrodes
lithium electrode cycleability and morphology dependence on current density, 27
inorganic film-forming electrolyte additives improving the cycling behaviour of metallic lithium electrodes and the self-discharge of carbon–lithium electrodes, 413

polarization behavior of lithium electrode in polymeric solid electrolytes, 439
Lithium insertion
lithium insertion into TiS_2 from various electrolytes, 301
Lithium intercalation
transition metal displacement in cathodic host structures upon lithium intercalation, 277
structural and electrochemical characteristics of a hollandite-type 'Li_xMnO_2', 657
Lithium oxide
preparation and electrochemical characteristics of new Li–Mn–V–O system as positive materials for rechargeable lithium batteries, 635

Manganese
investigations on rechargeable lithium alloys on the basis of Al–Ni and Al–Mn alloys, 421
an update of the Li metal-free rechargeable battery based on $Li_{1+x}Mn_2O_4$ cathodes and carbon anodes, 689
Manganese dioxide
impedance study of the interfaces between lithium, polyaniline, lithium-doped MnO_2 and modified poly(ethylene oxide) electrolyte, 83
investigation of an electrolyte for lithium secondary batteries with lithium-containing manganese dioxide as the positive material, 217
a study on electrolytes for manganese dioxide–lithium cells, 253
the versatility of MnO_2 for lithium battery applications, 289
anodic stability of propylene carbonate on manganese dioxide electrodes, 341
Manganese oxide
electrochemical and structural studies of the composite MnO_2 cathode doped with metal oxides, 533
studies of spinel $LiCr_xMn_{2-x}O_4$ for secondary lithium battery, 539
rechargeable lithium battery with spinel-related λ-MnO_2. I. Synthesis of λ-MnO_2 for battery applications, 551
rechargeable γ-MnO_2 for lithium batteries using a sulfone-based electrolyte at 150 °C, 569
preparation and electrochemical characteristics of new Li–Mn–V–O system as positive materials for rechargeable lithium batteries, 635
structural and electrochemical characteristics of a hollandite-type 'Li_xMnO_2', 657
Metal deposition
metal deposition and dissolution monitored by *in situ* scanning tunneling microscopy, 169
Metal dissolution
metal deposition and dissolution monitored by *in situ* scanning tunneling microscopy, 169
Metallized separators
metallized microporous polypropylene membranes as a support for thin-film electrodes, 493
Microbatteries
all-solid-state lithium microbatteries, 487
a thin-film solid-state microbattery, 505

Negative electrode
a new negative electrode matrix, BC_2N, for rechargeable lithium batteries, 75
high voltage, rechargeable lithium batteries using newly-developed carbon for negative electrode material, 233
studies of carbon as negative electrode materials for secondary lithium batteries, 399
Nickel
investigations on rechargeable lithium alloys on the basis of Al–Ni and Al–Mn alloys, 421
nickel Chevrel-phase sulfides $Ni_yMo_6S_{8-z}$ and $Ni_yMo_6S_{8-z}O_n$ as the cathode of lithium secondary batteries, 651
Nickel oxide
Li/Li_xNiO_2 and Li/Li_xCoO_2 rechargeable systems: comparative study and performance of practical cells, 209
the cycling properties of the $Li_xNi_{1-y}Co_yO_2$ electrode, 595
Nitride
a new negative electrode matrix, BC_2N, for rechargeable lithium batteries, 75
Non-aqueous cells
relationship between composition of the electrolyte solutions and energetic performance of 1.5 V non-aqueous cells of lithium/iron sulfide system, 355

Organic electrolytes
behavior of lithium/electrolyte interface in organic solutions, 1
effect of cycling on the lithium/electrolyte interface in organic electrolytes, 21
a rechargeable Li/Li_xCoO_2 cell incorporating a $LiCF_3SO_3$–NMP electrolyte, 673
an update of the Li metal-free rechargeable battery based on $Li_{1+x}Mn_2O_4$ cathodes and carbon anodes, 689
Oxyhalide
optimized lithium oxyhalide cells, 715
Oxysulfide
V_2O_4S — a new transition metal oxysulfide as positive for lithium batteries, 577

Parasitic reactions
parasitic reactions and the balance of materials in lithium batteries for implantable medical devices, 119
Passivating layers
ionic transport in passivating layers on the lithium electrode, 365
Photoelectrochemistry
photoelectrochemistry of lithium, 157
Polarization behaviour
polarization behavior of lithium electrode in polymeric solid electrolytes, 439
Polyacrylonitrile
impedance study for the interface and whole battery with PAN-based polymer electrolyte, 431
Polyaniline
impedance study of the interfaces between lithium, polyaniline, lithium-doped MnO_2 and modified poly(ethylene oxide) electrolyte, 83
polyaniline used as a positive in solid-state lithium battery, 499
development of cylindrical secondary lithium/polyaniline batteries, 669
Poly(ethylene oxide)
impedance study of the interfaces between lithium, polyaniline, lithium-doped MnO_2 and modified poly(ethylene oxide) electrolyte, 83
block copolymers of poly(ethylene oxide) materials for polymer electrolytes (transport properties), 467
Polymer-electrolyte batteries
ambient temperature rechargeable polymer-electrolyte batteries, 195
Polymer-electrolyte cells
interfacial phenomena in polymer-electrolyte cells: lithium passivation and cycleability, 9
Polymer electrolyte coatings
polymer electrolyte coatings for lithium anodes in $SOCl_2$ cells, 385
Polymer electrolytes
impedance study for the interface and whole battery with PAN-based polymer electrolyte, 431
polarization behavior of lithium electrode in polymeric solid electrolytes, 439
new conducting polymer networks, 445
lithium/polymer/polymer solid-state rechargeable batteries, 453
two-and three-electrode studies of cycling in experimental polymer electrolyte cells, 461
block copolymers of poly(ethylene oxide) materials for polymer electrolytes (transport properties), 467
enhancement of the ionic conductivity and the amorphous state of solid polymer electrolytes for rechargeable lithium batteries, 473
Polypropylene membranes
metallized microporous polypropylene membranes as a support for thin-film electrodes, 493
Polypyrrole
improvement of heavy-drain discharge properties of polypyrrole cathode by the electro-codeposition of carbon powder, 611
Potassium
potassium vanadates — promising materials for secondary lithium batteries, 561
reversible potassium vanadium bronze cathodes ($K_xV_6O_{13+y}$) with various potassium to vanadium ratios, 603
Propylene carbonate
anodic stability of propylene carbonate on manganese dioxide electrodes, 341
inhomogeneous electrochemical lithiation of V_2O_5–TeO_2 binary glasses in a propylene carbonate solution, 645

Rechargeable batteries
an update of the Li metal-free rechargeable battery based on $Li_{1+x}Mn_2O_4$ cathodes and carbon anodes, 689
Rechargeable lithium batteries
design concepts of high power bipolar rechargeable lithium battery, 327
enhancement of the ionic conductivity and the amorphous state of solid polymer electrolytes for rechargeable lithium batteries, 473
rechargeable lithium battery with spinel-related λ-MnO_2. I. Synthesis of λ-MnO_2 for battery applications, 551
rechargeable $LiCoO_2$ in inorganic electrolyte solution, 583
preparation and electrochemical characteristics of new Li–Mn–V–O system as positive materials for rechargeable lithium batteries, 635
Rechargeable lithium cells
Li/Li_xNiO_2 and Li/Li_xCoO_2 rechargeable systems: comparative study and performance of practical cells, 209
lithium-ion rechargeable cells with $LiCoO_2$ and carbon electrodes, 241
a rechargeable Li/Li_xCoO_2 cell incorporating a $LiCF_3SO_3$–NMP electrolyte, 673
a high performance Li_xMnO_y cathode material for rechargeable lithium cells, 681
Reliability
safety and reliability studies of primary lithium batteries, 247
Rubidium oxide
insertion of lithium into RuO_2–TiO_2 electrodes, 547

Safety
safety and reliability studies of primary lithium batteries, 247
safety aspects in primary high-rate lithium cells, 259
safety study of electrolyte solutions for lithium batteries by accelerating-rate calorimetry, 523
Sealed minicells
recent advances in experimental methods applied to lithium battery researches, 145
Self-discharge
inorganic film-forming electrolyte additives improving the cycling behaviour of metallic lithium electrodes and the self-discharge of carbon–lithium electrodes, 413
Solid–electrolyte interface
space-charge model of the SEI conduction in the $Li/SOCl_2$ system, 391
Solid-polymer electrolyte
application of solid-polymer electrolyte in lithium batteries: ultra-thin film battery, 89
Solid-state lithium batteries
electrochemical behaviors of Li^+ ion conductor, Li_3PO_4–Li_2S–SiS_2, 135
all-solid-state lithium microbatteries, 487
polyaniline used as a positive in solid-state lithium battery, 499
a thin-film solid-state microbattery, 505
Space applications
a high power lithium thionyl chloride battery for space applications, 317
Space-charge model
space-charge model of the SEI conduction in the $Li/SOCl_2$ system, 391
Spinel oxides
an update of the Li metal-free rechargeable battery based on $Li_{1+x}Mn_2O_4$ cathodes and carbon anodes, 689
Sulfide glass
electrochemical behaviors of Li^+ ion conductor, Li_3PO_4–Li_2S–SiS_2, 135
Sulfides
nickel Chevrel-phase sulfides $Ni_yMo_6S_{8-z}$ and $Ni_yMo_6S_{8-z}O_n$ as the cathode of lithium secondary batteries, 651
Sulfone-based electrolytes
rechargeable γ-MnO_2 for lithium batteries using a sulfone-based electrolyte at 150 °C, 569

Tellurium oxide
inhomogeneous electrochemical lithiation of V_2O_5–TeO_2 binary glasses in a propylene carbonate solution, 645
Thermal modelling
thermal modelling of a high power $Li/SOCl_2$ cell with parallel plates, 309
Thermal stability
thermal stability of lithium anodes in an amorphous V_2O_5/Li battery system, 517

Thin-film batteries
fabrication and characterization of amorphous lithium electrolyte thin films and rechargeable thin-film batteries, 103
thin-film vanadium oxide electrodes for lithium batteries, 127
Thin-film electrodes
metallized microporous polypropylene membranes as a support for thin-film electrodes, 493
Thionyl chloride
thermal modelling of a high power $Li/SOCl_2$ cell with parallel plates, 309
a high power lithium thionyl chloride battery for space applications, 317
polymer electrolyte coatings for lithium anodes in $SOCl_2$ cells, 385
space-charge model of the SEI conduction in the $Li/SOCl_2$ system, 391
Thiospinels
thiospinels as cathode for lithium secondary battery, 619
Titanium disulfide
a model for the deliverable capacity of the TiS_2 electrode in a Li/TiS_2 cell, 181
lithium insertion into TiS_2 from various electrolytes, 301
design concepts of high power bipolar rechargeable lithium battery, 327
the $Li_xTiS_2|Li_{(1-x)}CoO_2$ solid-state rocking chair battery, 481
Titanium oxide
insertion of lithium into RuO_2–TiO_2 electrodes, 547
Transition metals
the SWING system, a nonaqueous rechargeable carbon/metal oxide cell, 223
transition metal displacement in cathodic host structures upon lithium intercalation, 277

Ultra-thin lithium batteries
application of solid-polymer electrolyte in lithium batteries: ultra-thin film battery, 89

Vanadium
potassium vanadates – promising materials for secondary lithium batteries, 561
V_2O_4S – a new transition metal oxysulfide as positive for lithium batteries, 577
reversible potassium vanadium bronze cathodes ($K_xV_6O_{13+y}$) with various potassium to vanadium ratios, 603
Vanadium oxides
thermal stability of lithium anodes in an amorphous V_2O_5/Li battery system, 517
characterization of $Cu_2V_2O_7$ as cathode material for lithium cells by X-ray and photoelectron spectroscopy, 589
preparation and electrochemical characteristics of new Li–Mn–V–O system as positive materials for rechargeable lithium batteries, 635
inhomogeneous electrochemical lithiation of V_2O_5–TeO_2 binary glasses in a propylene carbonate solution, 645
Vanadium oxide electrodes
thin-film vanadium oxide electrodes for lithium batteries, 127